Amendments to the Claims:

Please cancel claims 1-17 without prejudice or disclaimer of the subject matter contained therein.

18. (New) A spore genetically modified with genetic code comprising at least one genetic construct encoding an antigen and a spore coat protein as a chimeric gene, said genetically modified spore having said antigen expressed as a fusion protein with said spore coat protein for use in oral or intranasal or rectal administration for therapeutic treatment.

19. (New) A spore as claimed in claim 18, wherein the spore is of Bacillus species.

20. (New) A spore as claimed in claim 18, wherein the genetic construct comprises at least part of a spore coat protein gene and at least part of an antigen gene, in the form of a chimeric gene.

21. (New) A spore as claimed in claim 18, wherein the antigen gene is located at the 3' end of the spore coat protein gene.

22. (New) A spore as claimed in claim 18, wherein the genetic construct comprises a spore coat promoter at the 5' end of the chimeric gene.

23. (New) A spore as claimed in claim 22, wherein the antigen is at least one of tetanus toxin fragment C or labile toxin B subunit.

24. (New) A spore as claimed in claim 18, wherein the spore coat protein is selected from the group consisting of *cotA, cotB, cotC, cotD, cotE, cotF, cotG, cotH, cotJA, cotJC, cotM, cotSA, cotS, cotT, cotV, cotW, cotX, cotY* and *cotZ.*

25. (New) A spore as claimed in claim 24, wherein the spore is heat inactivated so that in use it does not germinate into a vegetative cell.

26. (New) A spore as defined in claim 18 for use in the treatment of a medical condition.

27. (New) A composition comprising at least two different spores as defined in claim 18, wherein said at least two different spores express at least two different antigens.

28. (New) A composition as defined in claim 27, wherein the composition further comprises a pharmaceutically acceptable excipient or carrier.

29. (New) A composition comprising a spore as defined in claim 18 in association with a pharmaceutically acceptable excipient or carrier for use in oral or intranasal or rectal administration for therapeutic treatment.

30. (New) A composition comprising a spore as defined in claim 26 in association with a pharmaceutically acceptable excipient or carrier for use in oral or intranasal or rectal administration for therapeutic treatment.

31. (New) A composition as defined in claims 27, 28 or 29, for use in treatment of a medical condition, preferably the medical condition is inflammation, pain, a hormonal imbalance and/or an intestinal disorder.

32. (New) Use of a spore as defined in claim 18 in the manufacture of a medicament for use in the treatment of a medical condition, preferably the medical condition is inflammation, pain, a hormonal imbalance and/or an intestinal disorder.

33. (New) Use of a spore as defined in claim 26 in the manufacture of a medicament for use in the treatment of a medical condition, preferably the medical condition is inflammation, pain, a hormonal imbalance and/or an intestinal disorder.

34. (New) A method of medical treatment, which method comprises the steps of

a) administering a spore as defined in claim 18 to a human or animal in need of medical treatment by an oral, intra-nasal or rectal route;

b) said genetically modified spore eliciting an immune response for use in the prevention of a disease.

35. (New) A method of medical treatment, which method comprises the steps of

a) administering a spore as defined in claim 26 to a human or animal in need of medical treatment by an oral, intra-nasal or rectal route;

b) said genetically modified spore eliciting an immune response for use in the prevention of a disease.

36. (New) A method of producing a genetically modified spore, which method comprises the steps;

producing genetic code comprising at least one genetic construct encoding an antigen and a spore coat protein as a chimeric gene;

using said at least one genetic construct to transform a vegetative mother cell;

inducing said transformed mother cell to sporulate; and

isolating the resulting genetically modified spores.